POPULATION TODAY

Vol. 15, No. 1 January 1987

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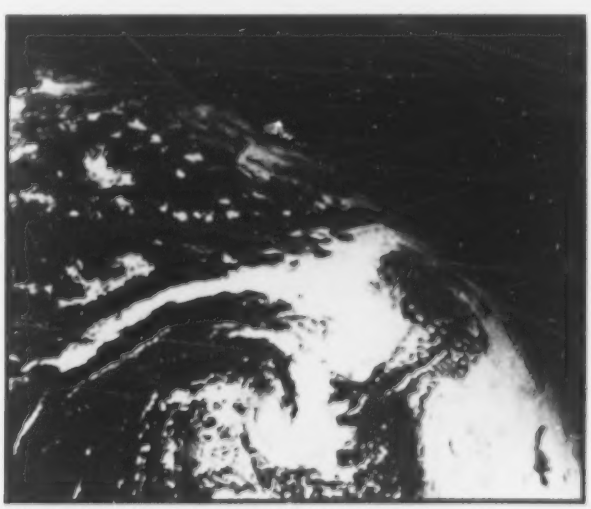

What does the future hold? See page 3.

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FROM THE EDITOR'S DESK

The Red Queen's favorite word was "moral"; *PT*'s favorite word, we have come to realize, is "inexorable."

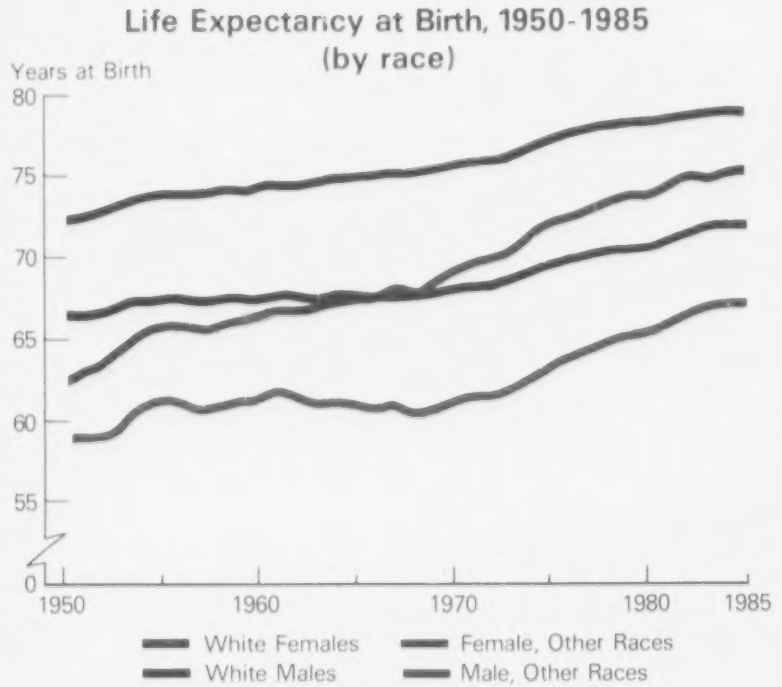
Ultimately from the Latin (*in* [not] + *exorare* [to prevail upon]), inexorable means that no plea will budge something from its predestined path: "Not to be moved by entreaty or prevailed upon; relentless; inflexible."

Shakespeare's Romeo describes his passionate intent as "More inexorable far/Than empty tigers or the roaring sea." We population writers are tempted to describe our passion for mathematical plots in equally momentous terms. As in, "Bouvier and Gardner predict an inexorable flow of newcomers to the U.S." (November 1986 *PT*); "a demographic trend inexorably reshaping U.S. society is the aging of the population" (September 1986 *PT*); or *PT*'s perennial series, "The Inexorable Aging of America."

But human trends are less relentless than the roaring sea; they may be petulant pussycats sometimes, but that doesn't make them empty tigers. So in the future, if at all possible, we'll try to be less momentous in our prose; maybe next time we'll make it "persistent flow of newcomers"; "presently shaping U.S. society"; "The Inertial Aging of America."

—Art Haupt

SPEAKING GRAPHICALLY



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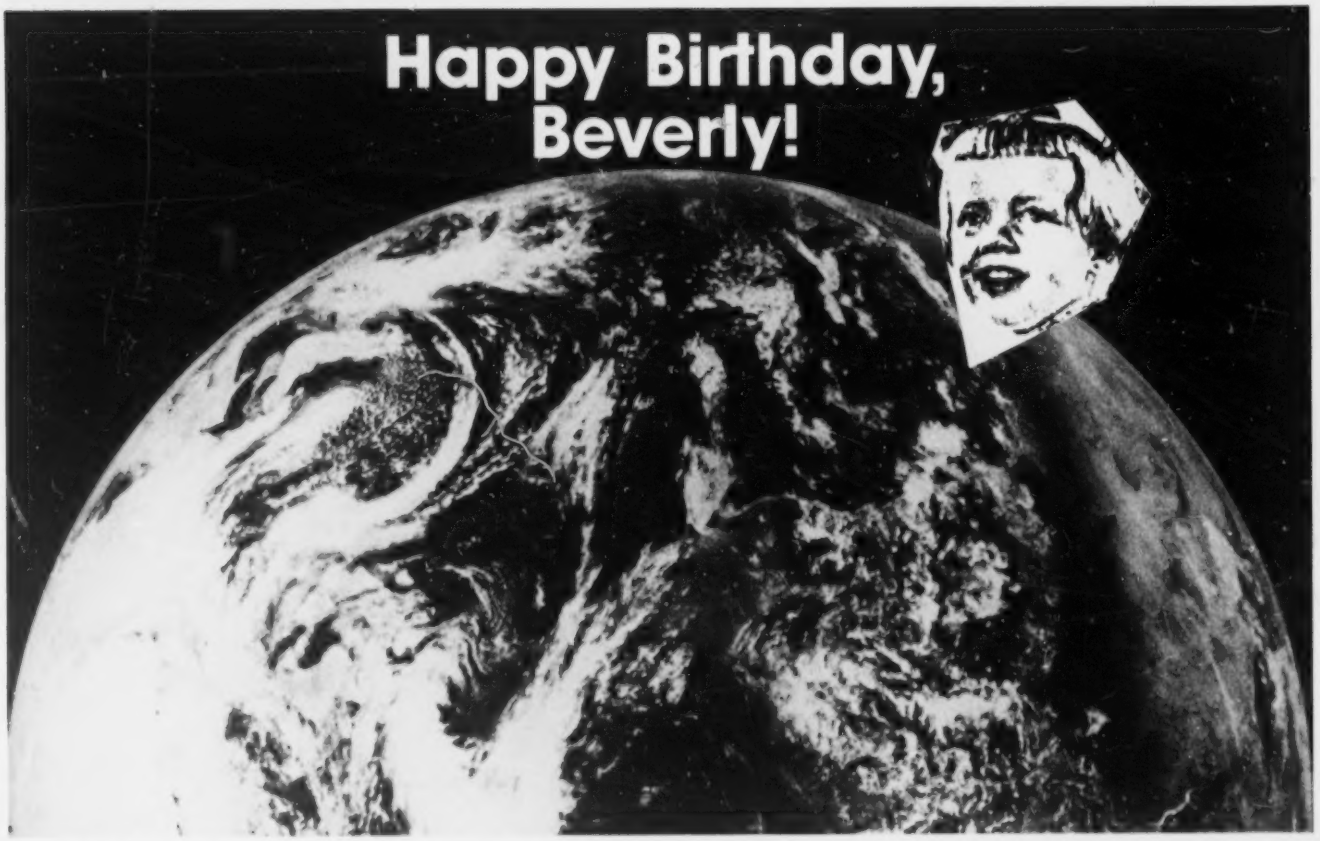
Happy Birthday, Beverly!



Call her Beverly. On Jan. 1 she arrived in the world, the hypothetical first U.S. birth of the new year 1987 – a year that will see 3,700,000 U.S. births. Welcome, Bev, the first baby born under the new U.S. tax laws.

What kind of life awaits this new arrival to the nation's cradles? That's a hard question to answer in the particular, but *PT* can offer aggregate, demographic (i.e., general) answers. And many questions about the future can be answered with little more than a glance at a computer monitor – and the calendar.

Jan. 2, 1987 – B's father, a forensic toxicologist, buys "Baby on Board" signs for his Volvo and B's mother's BMW.

1990 – B. is accepted by a neo-Montessori nursery school and matriculates.

1992 – B. watches TV special, "Perry Como's Walla Walla Christmas." (Sing to us, Mr. C.)

1992 – B. enters grade school in the midst of the 1990s teacher shortage. Classrooms are crowded, and *Time* magazine fusses "An apple for whom?"

2001 – The 21st century begins. Like most U.S. residents born in 1987, statistically speaking more than 80 percent of Beverly's life will be spent in the 21st century.

2005 – B. graduates from high school.

2006 – *Newsweek* publishes a cover story on failing Japanese economy, "Japan: Setting Sun?" and a national newspaper blares "We USA Japan!"

> Like most U.S. residents born in 1987, more than 80 percent of Beverly's life will be spent in the 21st century

2008 – B. graduates from college, a member of the class of "aught-eight" with an Engineering degree in Thermal Ceramics Design.

2010 – B. enters the labor force, working for Sony, a subsidiary of GE. She designs thermodynamic oscillators (TOs), a power source utterly essential to the national economy, which won't even be conceived of until 2001. At first, TOs were a plaything of the well-to-do, but soon the price had tumbled and the two-TO family became commonplace. The introduction of these marvelous machines has meant the final downfall of IBM, which had been slow to recognize their potential for widespread use.

2017 – B. signs household formation contract (HFC) with Rex Rumfold, a biomass custodian who works for the Harlingen, TX subway system. By this time, median age at first HFC has risen to 32.3. Their contract is the standard 48-month variety with asset pooling and a 24-month extension option.

2020 – B. bears her first child, Jason, a healthy boy, who during gestation benefited from standard gene-grafting procedures.

2021 – B. and Rex decide not to exercise their extension option and throw a wild party in their 212th floor Harlingen condo to celebrate the successful completion of their HFC.

2032 – B. signs second HFC with Roy Renfro, a Palm Beach social worker.

2033 – B. and Roy terminate their HFC under option 272(j) when Roy expresses desire to work in the depressed areas of Ohio and B. fears the danger of crime and martial law in the North.

2034 – The U.S. population stops growing due to natural increase, as was predicted by the Census Bureau back in

Continued on page 8

RU-486: A Revolution in Birth Control?

A new experimental oral drug developed in France holds the possibility of serving as a "once-a-month" pill as well as an abortifacient.

Invented by University of Paris professor Etienne-Emile Baulieu, RU-486 (the RU stands for Roussel Uclaf, the French pharmaceutical firm which financed its development and will market the drug) blocks progesterone, the hormone that prepares the uterus for the implantation of the fertilized egg.

Technically speaking, it binds itself to the progesterone receptors in the endometrium without fulfilling the functions of progesterone, thus blocking the progesterone's action. Menstruation then occurs, emptying the uterus.

RU-486 is currently undergoing trials in France. Baulieu, who spoke at a Washington, D.C., conference sponsored by Catholics for a Free Choice on Dec. 6, 1986, expects to see it approved by the French Ministry of Health by June 1987.

RU-486 can be used alone in the early stages of amenorrhea (from 4 days before expected onset of menstruation to 13 days after). Any time after that, the drug would be taken with a small dose of prostaglandin.

According to researchers, one advantage of RU-486 is that it bears few side effects. The user can expect bleeding with the onset of menstruation (bleeding induced by RU-486 can be heavier than regular menstruation) as well as possible cramps. The long-term effects of once-a-month use have yet to be determined, however.

In part because of the uncertainty of long-term effects, Baulieu does not currently encourage the use of RU-486 on a regular monthly basis. Instead, he thinks it should be used as a backup to the less-than-perfect contraceptives now available.

A significant advance in birth-regulating drugs, RU-486, because it involves blocking or terminating implantation of the embryo, carries with it some of the questions of the abortion controversy. Pro-life leaders have already expressed consternation over the potential implications of the drug. Its ultimate use would be to induce abortion in the privacy of the woman's home, out of the reach of outside interests. (It is likely in such a situation, though, that conventional abortions in clinics would continue to be performed.)

Baulieu holds hopes for it as an over-the-counter drug. But for the time being, and until years of extensive studies have been performed, it should, he said, be used only under a doctor's supervision.

Even if the drug passes muster in France and is approved for general use there, will the U.S. ever see its widespread use? That question is open to debate, but the prospect currently seems doubtful. According to Jacqueline Forrest, research director at the Alan Guttmacher Institute and a panelist at the CFFC conference, "It is highly improbable that RU-486 will be available to women in the U.S. in the forseeable future." Among other reasons, Forrest cited the current liability situation for U.S. pharmaceutical firms. Because of these concerns, she said, there are no present plans for any U.S. firm to introduce RU-486 onto the market. –*J.A.*

New Commission to Attack Infant Mortality

The U.S. Congress has authorized the establishment of a national commission "with the clear mandate to vigorously attack the problem of infant mortality in this country." President Reagan signed the legislation into law in October 1986.

In the one year allotted it, the commission's mandate is to examine and identify federal, state, and local resources whose activities have an impact on infant mortality through providing prenatal care to low-income women, such as the Women, Infants, and Children program (WIC), Medicaid, and public health facilities.

In the view of the Senate sponsor of the bill, Sen. Lawton Chiles (D-Fla.), a small investment in pre- and postnatal care will pay off in the significant reduction of low birthweight babies and a lower infant mortality rate (IMR). With the commission, Chiles seeks to reduce barriers to medical services, nutritional support, and health care for pregnant mothers and infants.

The U.S. IMR is 10.6 infant deaths per 1,000 live births, as of August 1986. While this is low by historical standards (only 30 years ago, the U.S. IMR was 26.0), the U.S. is behind at least 16 other developed countries in this measure. The country with the lowest measure is Finland, with an IMR of 6.0. If the U.S. had Finland's infant mortality rate, some 17,000 U.S. infant lives would be saved each year.

One activity of the commission will be to coordinate and focus the efforts of the many governmental and private agencies nationwide that have been working toward the reduction of infant mortality.

In the end, the commission will recommend a national policy designed to reduce and prevent infant mortality, including recommendations concerning appropriate roles for the federal government, states, local governments, and private sector. In addition, the commission is to recommend to Congress and the President the specific changes needed within federal laws and federal programs to achieve an effective federal role in preventing infant mortality.

The 15 members of the commission will include two senators; two members of the House; three representatives of state and local government, one of whom will be a governor; the Secretary of Health and Human Services; the Comptroller General of the U.S.; and six at-large members "with demonstrated expertise in maternal and child health."

Congress has authorized the commission, but has not appropriated the funds for it. The commission's proposed budget is $1 million. The appropriation process will start with the 100th Congress at the beginning of 1987; it is expected to take seven to eight months. Thus, the commission may begin its work in 1987, though it may well be delayed until 1988. –*J.A.*

New Data Sheet Observes UNICEF's 40th

In collaboration with UNICEF, PRB has produced *Children of the World*, a wallchart commemorating UNICEF's four decades of service to children. UNICEF had its beginnings in post-World War II relief efforts in Europe, but conditions for children throughout the developing world argued strongly for a permanent agency.

The new data sheet provides statistics on child health and socioeconomic conditions for the world's countries and clearly indicates that, while a good deal of progress has been made, there remains a great deal of work to be done on behalf of the world's smallest citizens.

Children of the World lists a new measure of mortality used by UNICEF, the death rate for infants and children below age five per 1,000 live births in a given year (abbreviated U5MR). The world U5MR is 91. Countries are arranged on the data sheet using their ranking on this measure, a somewhat different layout from PRB's other wallcharts. Afghanistan, Mali, and Sierra Leone have the highest child mortality with about 300 infant/child deaths per 1,000 births; Finland, Iceland, and Sweden have the lowest rate, about 8.

Also listed are percent of low-birthweight babies, infant mortality, percent surviving to age 5, education, immunization, literacy, access to safe water supply, and other data.

Children of the World is also available in French and Spanish editions. For information on ordering copies, contact either PRB, 777 14th St. N.W., Washington, D.C. 20005; or UNICEF, Division of Information and Public Affairs, 866 United Nations Plaza, New York, NY 10017. –*CH*

A Guide to Indexing and Abstracting Services

An index represents an analysis, usually by name and subject, of a document. Abstracting services perform the same function in locating and recording the contents of periodicals, books, and various types of documents, but also include a summary of the material indexed.

Two major indexing and abstracting services for demographic and population-related research are: **Population Index**, a book/manual index, and **POPLINE**, an online computer index or bibliographic database.

Population Index, edited by Richard Hankinson, is published quarterly – with annual cumulations – for the Population Association of America by Princeton University's Office of Population Research. It was begun in 1933 as *Population Literature* under the co-editorship of Frank Lorimer and Irene Taeuber. As it was then, it remains a major reference tool and vehicle for bibliographic research and the dissemination of noteworthy items within the field of demography.

The bibliographic citations within *Population Index* are arranged alphabetically by first author under the appropriate subject heading, e.g., fertility, migration, regional population studies. Each citation provides author, title, publishing information, a content and scope abstract, and – where possible – at least one location where a copy of the item can be found. *Population Index* also occasionally publishes review articles designed to present a general review of the literature on a specific topic of demographic interest. Professional meetings and conferences, new periodicals, official statistical publications, machine-readable data files, and author and geographical indexes round out the contents.

Established as POPINFORM in 1973, POPLINE (POPulation information onLINE) is a comprehensive, internationally accessible computerized database that provides bibliographic citations, with abstracts, on population and family planning literature worldwide. It is maintained by the Population Information Program (PIP) of the Johns Hopkins University, the Center for Population and Family Health Library/Information Program (CPFH) of Columbia University, *Population Index*, and the Carolina Population Center (CPC) of the University of North Carolina at Chapel Hill. (CPC began contributing to POPLINE in 1985, loading citations back to 1980. Pre-1980 CPC online citations are available through DIALOG's Population Bibliography.) The database is available through the MEDLARS system at the National Library of Medicine and is funded primarily through the U.S. Agency for International Development (AID) and also by the National Institute of Child Health and Human Development (NICHD).

Complete citations, with or without abstracts, and location information are available for a wide variety of materials, including some unpublished literature. The database contains over 125,000 records on research in various population-related fields, including human fertility, community-based services, demography, censuses, vital statistics, and related health, law, and policy issues. The file is updated monthly, adding approximately 12,000 entries annually.

A key concern in the use of both of these sources is document retrieval. One month's time should be allowed to obtain hard copies. Retrieval can be accomplished either by directly tracking the material through the location source(s) noted or via inter-library loan. Certain restrictions on document size and photocopying/handling charges are often applicable.

Whether a researcher should use a manual or online index depends upon several factors. The most obvious is availability, though time constraints and the anticipated user needs play important roles.

Generally speaking, when a broad, undifferentiated search requiring a few citations or the work of one author is needed, a manual index is an excellent source. On the other hand, an online index is extremely efficient when a specific topic and an exhaustive literature search are required, though a fee is usually attached. –*DM*

DEMOGRAPHER'S PAGE

Some Observations on Training Applied Demographers

by Gordon F. De Jong

As little as 10 years ago, addressing the issue of training applied demographers would have been improbable, except in selected developing countries. Now there are over 60 demographic services and consulting firms in the U.S., according to *American Demographics* magazine. In addition, some corporations and businesses employ demographers in their marketing and strategic planning units, and all states as well as many metropolitan and country governments include demographic analysis as part of their activities.

How should we train demographers for applied public and business sector positions? This paper addresses some of the issues implied in this question and draws upon the experience of the population training program at Pennsylvania State University.

Disciplinary Paradigms

An important issue relevant to the training of applied demographers is how demography is viewed as a discipline. There are two basic views:

1. That demography is a distinct discipline with several unique paradigms, or models, (i.e., demographic transition theory, stable population theory, etc.) which underlie the explanatory theories, hypotheses, methodologies, and statistical techniques that guide the discipline; and

2. That population questions are inherently parts of other social and biological science disciplines, and that basic and applied questions in demography are best approached by integrating demographic theories, methodologies, data, and statistical techniques into the paradigms and frameworks of these other disciplines.

The former approach emphasizes a curriculum that focuses on demographic topics: fertility, mortality, migration, population composition, demographic data, demographic models, the demography of specific sub-areas, etc. The latter approach emphasizes a curriculum with courses that seek to integrate population structure and dynamics with the theories, frameworks, methodologies, and problems of other social and biological science disciplines.

> How should we train demographers for applied public and business sector positions?

At Penn State, we follow this latter approach to demographic training. For example, the entry-level graduate courses are entitled social demography, economic demography, and population geography. While these courses clearly involve some overlap in topics covered (migration, for example), the way the questions are formulated, the theories and frameworks used to address these questions, and the methodologies proposed to arrive at answers to basic and applied problems are clearly not the same. Students are introduced to competing explanations, not only of the causes but also consequences of population structure and change.

The core population seminars that build upon these entry-level graduate courses also reflect a multidisciplinary perspective: i.e., family demography, fertility and development, ecology and small town population change, population geography problems, economic development in the U.S. and developing countries, and population theory and policy. Certainly problems of applied demography are not the major focus of these courses. However, the diversity in explanatory systems and methodologies that this view of demography provides is an appropriate perspective from which to address such applied demographic issues as local area economic development, human service needs, the changing labor force, minority population equity questions, resource allocation, and similar problems.

Specialized Demographic Methods

A thorough knowledge of demographic materials and the specialized demographic techniques to work with macro (aggregate or area) as well as micro (individual) data files is critical in training applied demographers. Like many training programs we offer three specialized demographic methods courses:

1. A survey course of basic demographic data and techniques, including estimates and projection methods;

2. A data systems course on how to manage census files and display results in computer graphics;

3. An applied mathematical demography course which addresses the mathematical and statistical bases for many of the advanced techniques involving stable population theory, rate structures, projections, and similar problems. We see these courses as relevant to the training of academic as well as applied demographers.

Specialized *demographic* techniques alone, however, may not constitute excellence in applied demographic training. Many of the population-related economic development, human service, marketing, and program allocation questions as well as some population estimates and projection models involve regression and/or log linear analyses. These techniques need to be available to applied demography students through a course sequence in either social statistics or econometrics. For advanced graduate students, a minor in applied statistics may be desirable, including specialized courses in sampling theory, time series analysis, advanced regression methods, etc. Our experience also suggests that some tasks in applied demography require spatial modeling or program evaluation methods, and we offer courses in both of these areas as options in the demography program.

Gordon F. De Jong is professor of sociology and Director of the Population Issues Research Center, the Pennsylvania State University

We conclude that specialized demographic methods courses provide necessary but not sufficient skills for well-trained applied demographers. Indeed, methods and techniques in the absence of substantive knowledge do not provide the breadth in demographic perspective that is so important for applied demographers, especially business demographers who frequently deal with strategic planning problems.

Research and Practicum Opportunities

The applied demography research and practice opportunities of students depend in part on the research program of the faculty in the population training program. Some population research centers, including Penn State, have formal or informal relationships with a State Data Center. This relationship can provide unique opportunities for student experiences in such activities as responding to client data requests, producing population estimates and projections, or preparing descriptive briefing reports and demographic profiles which are part of the stock and trade of public sector demographers.

The basic issue, however, may be the opportunity to experience the application of the *demographic perspective* to research and policy questions. We start this emphasis with a sophomore-level population analysis project. Usually this is the first opportunity students have for hands-on experience with demographic trend analysis and data manipulation. This course is very popular at Penn State, with an annual enrollment of approximately 300 students from many social science and planning-related majors.

Examples of key factors in supportive research and practical experiences (particularly of graduate students) include the way faculty members address demographic research questions, whether applied problems are investigated, the institutional ethos toward involving students in research programs, the encouragement for thesis experience with applied issues, and the amount of funded research. Developed-country students can find much to learn from the demographic program and policy applications and evaluations in some developing countries, which are, in many cases, state-of-the-art. Thus, an emphasis in a population center on international population research may provide a positive atmosphere for raising questions about policy causes and consequences of population dynamics. For example, a comparative developing-country study of the impact of electrification on fertility decline helps students critically evaluate the logic of the interrelationships between socioeconomic development and demographic change. U.S. students sometimes shed some of their applied demographic naivete through studying selected developing-country demographic literature and interacting with their developing-country classmates on applied-demography policy issues.

> One factor is faculty attitude toward students' varying employment goals

Because of the considerable diversity in the task assignments of business and public sector demographers, we would argue that relevant research and practicum experiences can be garnered in a variety of settings and institutional arrangements, and are not limited to experiences in the preparation of population estimates and projections.

Attitude and Faculty

Another factor influencing the training of applied demographers is the attitude of the faculty concerning knowledge application and the legitimacy of public and private sector employment goals of students in training programs. Students quickly get the message of how faculty perceive the ranking of academic relative to nonacademic employment opportunities. Behind these perceptions may lie different views of demography as a field of study: for example, the view of demographic knowledge for knowledge's sake, the view that demographic knowledge and techniques may have applications to practical problems, or the view that demographic knowledge and techniques are justified primarily if not exclusively in terms of their application potential.

In part these views reflect the diverse traditions (i.e., land grant university, private university, liberal arts college) in American higher education. A successful applied demography program probably needs a balance of these views with some faculty who can articulate linkages between demography as a science and applied sector problems.

Conclusions

In this essay many dimensions of the training of applied demographers have been discussed. I have emphasized (a) the relevance of the training-program paradigm of demography, (b) the availability of a wide range of specialized methods and skills courses, (c) the opportunities for a variety of applied and policy-relevant research and practicum experiences, and (d) the importance of the attitude of the faculty toward public and private sector employment goals of students.

Largely absent from the above list of applied demographic training issues are experiences in the application of demographic materials and perspective to the *process* of corporate strategic planning or to public sector policy decision making and evaluation.

For example, the documentation of the decline in the teenage population and the projection of this age group for state and local areas is a well accepted dimension in the training of applied demographers. Seldom, however, do demographic research or training programs provide experiences in, or training concerning the ways demographic data and trends are actually used by policymakers to make decisions on resource allocations, program initiation, personnel needs, site

Continued on page 8

Demographers Page

Continued from preceding page

location decisions, or the evaluation of program effectiveness.

Is an excellent training program for applied demographers inherently different than that for other academic demographers? Given the current development of applied demography, I am not sure that the answer is yes. The future, however, may see more specialization, with a closer integration of applied demographic training with quantitative policy analysis and with marketing curricula rather than with more and more emphasis on specialized demographic substantive and techniques courses.

POSSLQ Rise Slows

While the number of unmarried-couple households had been growing rapidly during the 1970s, growth in that type of living arrangement tapered off in the early 1980s. From 1984 to 1985, the Census Bureau's Current Population Survey reported no increase, with the number of such households just below 2 million. Advance data for 1986, however, indicate a resumption in growth, but the annual rate of increase in the 1980s, 5.6 percent, was about half that of the 1970s.

According to the Census Bureau's *Marital Status and Living Arrangements: March 1986 (Advance Report)*, in 1985, there were 2.2 million households containing POSSLQs (Persons of Opposite Sex Sharing Living Quarters) in 1986, five times the number in 1960. Compared to such households in the past, today's unmarried-couple households are younger and more likely to be childless. In 1985, 79 percent of the partners were below age 45 and 70 percent had no children. In 1960, the comparable figures were 33 and 55 percent, respectively. Unmarried couples accounted for about 4 percent of all couples in 1986.

Keep in mind that the definition of unmarried-couple household does not necessarily imply a close personal relationship, but includes any number of possibilities, such as an elderly woman with a male student boarder. – *C.H.*

Beverly

Continued from page 3

1997 when immigration was outlawed.

2035 – Outer space now has a population of 1,018 based on a projection from an interstellar census conducted in the late 1970s by the Hudson Institute (now of Covina, Calif.).

2036 – Roy returns from Ohio a beaten man. B. agrees to reinstate their HFC at the point of termination.

2037 – B., now 50 years old, "bears" second child in vitro, thanks to an ovum frozen earlier. No longer are women limited by menopause. Jason, meanwhile, is now 17 years old.

2038 – Despite this new birth, R. and B. are taking care of more parents (four) than children (two). A national trend toward self-sufficiency and government frugality have helped to bring extended families together.

2039 – R. and B. retire. Their $375,000 pension enables them to retire to a modest home in Reagan City, Fla.

2040 – U.S. becomes the world's largest kelp exporter, but relies heavily upon controversial sales to the People's Republic of England.

2041 – B's first child, Jason, graduates from college with the class of '41.

2042 – Jason now works as an Interocitor repairperson. Interocitors began supplanting TOs in the late 2030s.

2045 – Because no one listened to demographers, Social Security, the national annuity chain letter, has metamorphosed into the presentation of an honorary gold pocket watch sent from Social Security headquarters in Phoenix to all workers who have accumulated at least 250 work points.

2050 – The buildup of CO_2 in the atmosphere has led to a "greenhouse" heating of the global climate. This means, among other things, a 3° F rise in temperature, the arrival of a semi-permanent drought in the U.S. Midwest, and a rise in the sea level of 3 to 6 feet that drowns or threatens coastline cities, including New York and New Orleans. This gives new meaning to the term "oceanfront property."

2051 – Demographers finally are given the respect they deserve. Demographic consultants open offices in every neighborhood and are consulted like doctors, lawyers, and soothsayers.

2060 – The world now has a population of 7,000,000,000 (birth control caught on a lot more quickly in developing countries than anyone expected). Poverty and unemployment are low, as most people now are employed by international bureaucracies.

2065 – B. has now reached the life expectancy of 78 years prophesied for her in 1987. As a demographic consultant comfortingly tells her, "You're on your own, now." She has 0 living parents and parents-in-law, two children, three grandchildren, and three great-grandchildren. Hallmark does a booming business on Great Grandparents Day.

2076 – Outer space now has a population of 11,000, according to the Hudson Institute's "moderate" projection.

2086 – B. expires while jogging on a sunny Saturday afternoon, a shock to many who remarked on her apparent good health and mourn, "She was so young."

2101 – B's first child is now 80 years old and her second child, who retired to a dome colony on the planet Mars, is 63 – two citizens of the 22nd century, who, thanks to their mother's nursery tales, know all about Perry Como. – *A.H., C.H.*

Call for PRB Fellows

PRB is looking for applicants to a fellows program for graduate students in population studies and other fields relevant to population programs in developing countries. Applicants must be developing country nationals.

Participants in the fellows program will present brief papers at a one-day Population Policy Seminar at the annual meeting of the Population Association of America in Chicago on April 29, 1987. In addition, in July 1987, fellows will attend a two-week workshop at PRB in Washington, DC.

Actual travel costs will be provided, along with a per diem and small stipend.

Interested candidates should write to Wendy Patriquin at PRB, 777 14th St. NW, Suite 800, Washington, DC., 20005, describing their interests, qualifications, and reasons for applying to this program. A curriculum vitae, brief description of current research and plan for explaining its policy impact, and letters of recommendation from professors are also requested. Deadline for application is Feb. 13, 1987.

The Demographic Dichotomy

The dichotomy presented by the rapidly growing countries of the developing world and the slow or nonexistent growth of the more developed countries is examined in the latest Worldwatch Paper *Our Demographically Divided World*, by Lester R. Brown and Jodi Jacobson, published by the Worldwatch Institute.

The report, sponsored by the UN Fund for Population Activities, divides the world into two parts. The slow-growth portion includes North America, Western and Eastern Europe, (including the USSR) and East Asia (including China). All together, this portion contains 2.3 billion people, just under half the world total, and has a population growth rate of 0.8 percent per year.

The rapidly growing segment contains the balance: Africa, the Middle East, the Indian subcontinent, Southeast Asia, and Latin America, and houses 2.6 billion people. Growing at 2.5 percent per year, it adds 64 million people annually, compared with 19 million in the slow-growth part.

"The demographic middle ground has largely disappeared," report the authors. "Where population growth is slowing, rising living standards and falling fertility are reinforcing each other. Unfortunately, rapid population growth and environmental deterioration also feed upon each other, eventually leading to a downward spiral in living standards."

Rapidly growing countries, the report observes, will have to make a choice between a vigorous family planning program or declining living standards. "In just over half the world, time is running out in the effort to slow population growth by reducing birth rates," Brown and Jacobson conclude.

—*I.A.*

Copies of *Our Demographically Divided World*, by Lester R. Brown and Jodi Jacobson, are available from the Worldwatch Institute, 1776 Massachusetts Avenue, N.W., Washington, D.C. 20036. Single copies are $4.00 each; 2-5 copies, $3.00 each; 6-20 copies, $2.00 each; 21 or more copies, $1.00 each.

SOFTWHERE

The purpose of **BIFs** (Basics in Forecasting: Population and Economic Models) is to introduce students to the basics of economic and population forecasting. By working through several different models, students learn the strengths and weaknesses of forecasting and are introduced to concepts of computer modeling.

Students construct models to forecast population and economic models for states using the data provided in the package. BIFs contains two population models – simple population growth and cohort-component population – as well as five economic models. The package also features the option of comparing the results of two models. Results of the forecasts are reported as tables and graphs.

The package includes a User's Guide and software on two diskettes (one copy-protected original and one backup). The User's guide contains exercises to be completed in conjunction with running the computer models. State Data and instructions for completing forecasts for cities and counties are also included in the guide. The package requires an IBM PC and 192K memory. For more information write: CONDUIT, The University of Iowa, Oakdale Campus, Iowa City, Ia. 52242

—*K.C.*

POPULATION UPDATE

Estimated United States Population:

As of August 1, 1986	241,677,000
As of August 1, 1985	239,494,000

The above estimates include armed forces overseas and are from U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 994.

Estimated World Population:

As of January 1987	4,984,000,000
Annual growth	83,000,000

Estimated by extrapolation of the mid-1986 population given on PRB's 1986 World Population Data Sheet.

Latest Provisional Statistics for the U.S.: August 1986

	12 months ending with August					
	Number		Rate			
Item	1986	1985	1986	1985	1984	1983
Live births	3,714,000	3,750,000	15.5	15.8	15.5	15.8
Deaths	2,095,000	2,080,000	8.7	8.8	8.6	8.6
Natural increase	1,619,000	1,670,000	6.8	7.0	6.9	7.2
Marriages	2,391,000	2,446,000	10.0	10.3	10.4	10.6
Divorces	1,181,000	1,183,000	4.9	5.0	4.9	5.1
Infant deaths	39,300	39,500	10.6	10.6	10.7	11.0
Population base (in millions)			240.2	237.6	235.2	233.0

Note: Rates are given per 1,000 population, except for infant deaths, which are given per 1,000 live births. Rates are based on revised population estimates from the 1980 Census.

Source: Monthly Vital Statistics Report (Vol. 35, No. 8) from the National Center for Health Statistics.

Glamorous Population Field Beckons

Careers in the population field hold "a rich and exciting intellectual challenge," says the Population Association of America.

For anyone considering a population career, the PAA has just published a wide-ranging new guide, "Careers in Population." What population careers? The field features such job titles as demographer, population specialist, and professor, not to mention writer/researcher.

Universities and colleges employ half the U.S.'s population specialists, the PAA estimates. Other employers: the Census Bureau and a host of federal agencies, where population specialists analyze statistics and supervise international population assistance. States also monitor population change, and a number of state governments maintain an office of state demographer.

Some 50 private organizations in the population field also employ their share of demographers. The biggest "growth industry," however, is currently the private sector, which is making use of demographic data and analysis as planning tools in the marketplace.

While population is not as populous a field as say, economics, the positions are out there. The PAA, the national professional society of population specialists, has a membership of about 2,600.

The PAA guide includes a list of some 29 universities in the U.S. and Canada which have centers or programs where advanced demographic training is available. (Most offer M.A.s or PhDs in related social science fields, with a specialization in demography.) For many applied careers, an M.A. is necessary; for more academically concentrated areas, a PhD may be needed.

For the interested demographic student, the PAA says, the field offers "an abundant variety of career opportunities offering competitive professional income levels and ample room to grow."

For a copy of the 16-page pamphlet "Careers in Population" contact: the Population Association of America, Inc., P.O. Box 14182, Benjamin Franklin Station, Washington, D.C. 20044. —*A.H.*

TAKE A NUMBER

Census's Hispanic Projections: The Census Bureau has begun regularly issuing projections of the Hispanic (or "Spanish origin") population in the United States with a detailed report in its *Current Population Reports* series (P-25, No. 995). Hispanics will be included in future national projections issued by the Bureau.

The new series provides a broad range of choices, based upon the assumptions about future birth and death rates and, of course, immigration one selects. The projections have been run to 2080 and project a Hispanic population growing from about 16 million in 1982 to anywhere from 35 to 141 million by 2080. Given this wide range, a close look at the assumptions will be an interesting, if not essential, exercise for most users of the data.

Hispanic fertility was assumed to follow the same path as that for the national projections, i.e., an "ultimate" total fertility rate of 1.9 children per woman in the "middle" series, 1.6 in the low series, and 2.3 under the high assumption. But since Hispanic fertility starts from a higher level, 2.7 lifetime births per woman, it does not reach the replacement level of 2.1 births per woman until about 2040 (under the medium assumption). For mortality, Hispanic life expectancy was assumed to converge with that of the white, non-Hispanic population in the long run.

When dealing with the U.S. Hispanic population, the assumptions on immigration are most likely to cause discussion and perhaps even some controversy, given the wide range of figures used for illegal immigration. The Bureau's low series assumes 86,000 annual Hispanic immigrants, the middle series, 143,000, and the high, 362,000. Only the high assumption includes an estimate for illegals, 212,000 per year, but it also makes a deduction of 31,000 for emigration. The difference caused by these assumptions is striking. The middle-series Hispanic population projected for 2050 is 51 million, but when the middle-series fertility and mortality assumptions are held constant and high immigration used, the 2050 population would be 78 million. —*C.H.*

ADDENDA

Calvin & Hobbes

IT'S HARD TO BELIEVE PEOPLE STILL STARVE IN THIS WORLD
THERE'S EVEN HUNGER IN AMERICA
SOME PEOPLE NEVER GET ENOUGH TO EAT
BOY, I KNOW WHAT THAT'S LIKE!
NO YOU DON'T

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CURRENT READINGS

PRB welcomes materials on population topics for possible inclusion in Current Readings. Publishers may address review copies to Book Review Editor, POPULATION TODAY, Population Reference Bureau, 777 14th St., N.W., Washington, D.C. 20005.

THE NEW AMERICAN GRANDPARENT: A Place in the Family, A Life Apart, by Andrew J. Cherlin and Frank F. Furstenberg, Jr. New York: Basic Books, 1986. 278 pages. $17.95. ISBN 0-465-04993-1.

With this book, family sociologists Cherlin and Furstenberg bring American grandparents out of the shadows and into the limelight. The authors note that up until the mid- to late-1970s research on American grandparents was "peculiarly marginal." Researchers typically regarded grandparents as isolated, cut off from kin, and something of a social problem. But while the nuclear family has been receding in importance with the increase in divorce and remarriage in the 1960s and 1970s, in certain ways the extended family has been making a comeback; lately grandparents have been rediscovered as "family watchdogs," sought after in their roles of "sources of support in reserve"—when, for example, parents break up and children are buffeted by tension and change.

What then is new about the American grandparent? In terms of both what is actually happening and what older people seem to want, more and more grandparents are experiencing "intimacy at a distance"—living in a separate household with independent lives of their own, but keeping in close touch with their families to share companionship and support.

This book is much more than a study of grandparents. The authors have used insights they obtained on the attitudes and behavior of grandparents to write a thoroughly readable and informative book about changes in the contemporary American family.

—Alice T. Day
Senior Research Associate
The Urban Institute

MARGARET SANGER AND THE BIRTH CONTROL MOVEMENT: A Bibliography, 1911-1984, by Gloria Moore and Ronald Moore. Metuchen, N.J.: Scarecrow Press, 1986. 230 pages. $18.50. ISBN 0-8108-1903-1.

This volume presents a retrospective, annotated bibliography for those wishing to review the life and works of Margaret Sanger (1879-1966), a pioneer in the American birth control movement. The authors have assembled thousands of citations, arranged in chronological order from 1911 to 1966. In addition, the bibliography contains citations on Sanger obituaries, major biographies with reviews, and citations covering the period 1967 to 1984. Titles of materials written by Sanger, major bills favoring birth control, pro-birth control hearings held in the United States, and author and subject indexes are also included.

The locations of special collections housing materials either on Sanger or on birth control are provided with an OCLC (Online Computer Library Center) number added to aid in interlibrary loans. Though geared toward an audience of college and research scholars, efforts were made to include materials for high school students as well. This volume is an excellent historical resource on the American birth control movement, particularly in light of increased public attention to school-based birth control clinics and sex education within public school systems.

—Denise Molajo

WOMEN IN THE WORLD: An International Atlas, by Joni Seager and Ann Olson. New York: Touchstone Books, 1986. 128 pages. $12.95 (paper). ISBN 0-671-63070-9.

This atlas presents a plethora of colorful maps displaying a wide variety of indicators of women's status. Clearly feminist in perspective, many of the book's maps and charts reflect a primary concern of women: reproductive health and freedom. In addition, this atlas maps other social, economic, and political indicators, including prostitution, rape, and beauty contests across the world.

While the maps are imaginative, they tend to be overwhelmingly busy. The designer of the maps and charts outdid herself in finding cute symbols to represent the various indicators (for instance, different size pencils to represent school enrollment for girls). Sometimes this works, but often it is simply distracting.

Though elaborate graphics were obviously a priority in the production of this atlas, its strength lies in the data it presents, not in the presentation itself. Well researched and exhaustive in its attention to the diversity of factors affecting women worldwide, this book should prove to be a valuable resource. It is unfortunate that the reader has to work so hard deciphering the maps and charts in order to reach the data.

—Janine Adams

Books Received

AGE STRUCTURE OF MORTALITY IN DEVELOPING COUNTRIES: A Data Base for Cross-Sectional and Time Series Research (ST/ESA/SER.R/66), by Dept. of International Economic and Social Affairs. New York: United Nations, 1986. 267 pages.

AN INTRODUCTION TO POPULATION, by Kenneth C. W. Kammeyer and Helen L. Ginn. Chicago: Dorsey Press, 1986. 336 pages.

GLOBAL HUNGER: A Look at the Problem and Potential Solutions, edited by Malcolm H. Forbes and Lois J. Merrill. Evansville, Ind.: University of Evansville Press, 1986. 164 pages. $9.95.

HEALTH CONDITIONS IN THE AMERICAS, 1981-1984 (Scientific Publication No. 500), by Pan American Health Organization. Washington, DC: PAHO/WHO, 1986. Vol. I: 416 pages, $8.00; Vol. II: 250 pages, $8.00.

PERIODIC ABSTINENCE IN DEVELOPING COUNTRIES: Update and Policy Options, prepared by Family Health International for Demographic Data for Development, Institute for Resource Development at Westinghouse. NC: Family Health International, June 1986. 94 pages.

SOUTH AMERICA ECONOMIC HANDBOOK, (First edition) by Euromonitor. London: Euromonitor (distributed by Gale Research, Detroit), 274 pages. $80.00.

SPOTLIGHT

MADAGASCAR

Population (mid-1986 est.): 10.3 million
Land area: 225,656 sq. miles
Births per 1,000 pop.: 45
Deaths per 1,000 pop.: 17
Rate of natural increase: 2.8 percent
Total fertility rate: 6.1
Infant mortality rate: 67 infant deaths per 1,000 live births
Life expectancy at birth: 50 years
GNP per capita (1983 est.): US$310
Capital: Antananarivo

by Janine Adams

Located some 250 miles from the Southeast coast of Africa – and still floating east – the Democratic Republic of Madagascar consists of the fourth largest island in the world, along with several much smaller islands. While the climate is moderate in the center part of the main island, it is tropical around the coast.

Almost every native plant and form of wildlife in Madagascar is found nowhere else. The flora and fauna of Madagascar are so unique that the nation has been called "the single highest conservation priority in the world." Most celebrated are its 40 kinds of lemurs, nocturnal creatures related to the monkey, which dwell in Madagascar alone. Scientists hold great hope for the lessons to be learned from the study of these creatures.

Given its proximity to Africa, the indigenous population of Madagascar could be expected to be of African descent. In fact, research suggests that the island was unpopulated before the beginning of the Christian era, when Indonesian seafarers first landed in eastern Africa, dropping by for African wives and slaves, and then settled in Madagascar. The result is a melting-pot mixture of Africans and Asians.

Malagasy, the official language of Madagascar, is of Malayo-Polynesian origin and is the sole indigenous language of the island. In addition, the colonial history Madagascar shares with France has resulted in widespread knowledge of French among the more educated segments of the population.

Like many less developed countries, Madagascar is experiencing high fertility and relatively high (but declining) mortality. Immigration and emigration are not significant demographic factors for Madagascar. The relatively high growth rate is of little concern to the government in the long run. Rapid growth is seen as good for future economic expansion and utilization of the country's yet unexploited natural resources, such as its mineral deposits of chromite, bauxite, and graphite. In the short run, however, the government sees rapid population growth as unfavorable to employment and income distribution.

No direct intervention, either pro- or antinatalist, has been taken, though the overall socioeconomic development strategy gives priority to combatting poverty, unemployment, and the uneven distribution of income. The health policy pays special attention to children and pregnant women; among the government's goals is the reduction of the infant mortality rate. The government recognizes the rights of individuals and couples to have access to information on contraception and to determine the number of their children.

Some 78 percent of the population lives in the rural sector. Indeed, the majority of the population exist on subsistence agriculture. Though an agricultural exporter, much of the nation's agricultural production goes toward feeding its people. Once an exporter of rice, in 1972 the nation began to import rice to meet its needs. Agricultural products do make up a large proportion of Madagascar's exports, however. Madagascar is the world's leading supplier of cloves and vanilla, making it an indispensable (if generally unrecognized) supplier to bakers worldwide.

Public health clinic in Antananarivo

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